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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,061	03/12/2004	Takahiko Yamasaki	36549	8441

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EXAMINER	
LEUNG, PHILIP H	

ART UNIT	PAPER NUMBER
3742	

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/800,061	YAMASAKI ET AL.	
	Examiner	Art Unit	
	Philip H. Leung	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *19* is/are allowed.

6)☒ Claim(s) *1,3-18,20 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 11 is rejected under 35 U.S.C. 102(a) and 102(e) as being anticipated by Hayakawa (WO 03/077604) (newly cited).

Hayakawa shows a high frequency heating apparatus for heating a thing to be heated (M), comprising: a high frequency generating portion (13); a heating chamber (11) for accommodating the thing to be heated; a steam generating portion (15) for generating steam (S) in the heating chamber and a steam delivery means for guiding the generated steam from inside the heating chamber to outside the heating chamber through a steam delivery path back into the heating chamber (as shown in Figures 7 and 16, the steam generated in the heating chamber is drawn through the intake ventilation holes 29 by the fan 17 outside the heating chamber and back to the heating chamber 11 through the blast ventilation holes 31 of the partition plate 27; see page 33, line 5 – page 34, line 17).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 8, 9, 12-15, 20 and 21 and are rejected under 35 U.S.C. 103(a) as being obvious over Hayakawa (WO 03/077604), in view of Yoneno et al (US 5,525,782) (previously cited).

Hayakawa shows a high frequency heating apparatus for heating a thing (M) to be heated comprising: a high frequency generating portion (13); a heating chamber (11) for accommodating the thing to be heated; a steam generating portion (15) for generating steam (S) in the heating chamber located in the lower back portion of the heating chamber (as shown in Figures 1, 7-9 and 16 and pages 27-41). Therefore, Hayakawa shows every feature as claimed except for the use of a partition plate which serves to mount the thing to be heated thereon and is provided to be upward removable apart from a bottom face of the heating chamber a predetermined interval. However, it is pointed out that the use of partition plates in a cooking chamber is a routine and well known feature in the art of ovens. Anyway, Yoneno shows a high frequency heating apparatus for heating a thing to be heated, comprising: a high frequency generating portion 32; a heating chamber 2 for accommodating the thing to be heated; a steam supply portion 40 for supplying steam into the heating chamber; and a partition plate which serves to mount the thing 1 to be heated thereon and is provided to be upward removable apart from a bottom face of the heating chamber at a predetermined interval (shown in Figures 4-7), thereby dividing a space in the heating chamber, wherein at least one of a high frequency and

steam generating portion is supplied to the heating chamber and the steam is supplied into an upper space (discharge port 8, 17) positioned above the partition plate (see Figures 4-14 and 21 and col. 7, line 12 – col. 16, line 4). It would have been obvious to an ordinary skill in the art at the time of invention to modify Hayakawa to use partition shelves in the heating chamber for dividing the chamber into sections in order to support a plurality of food items to be microwave heated and/or steam heated at the same time for more heating efficiency and result, in view of the teaching of Yoneno. In regard to claims 8 and 9, heater 3 of Yoneno or heater element 10 of Kikuchi is the claimed preheating means including an upper heater provided in an upper part of the heating chamber. In regard to claim 11, see Figures 5, 6, 14 and 21 of Yoneno. In regard to claim 12, see Figures 4-6 of Yoneno. In regard to claim 15, element 33 in Figures 1 and 8 of Hayakawa is the claimed distribution means. In regard to claim 20, Hayakawa also shows the claimed cover 41 for the pan 35 (see Figures 10A and 10B).

5. Claims 3, 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being obvious over Hayakawa (WO 03/077604), in view of Yoneno et al (US 5,525,782), as applied to claims 1, 8, 9, 12-15, 20 and 21 above, and further in view of Kawada (JP 54-10460) (previously cited).

Hayakawa combined with Yoneno shows every feature as claimed except for the material of the partition plate. Kawada shows a microwave oven with a steam generating portion on the bottom of the heating chamber below a metal partition part 21 and 22 as shown in Figure 3. It would have been obvious to an ordinary skill in the art at the time of invention to further modify Hayakawa combined with Yoneno to locate the steam generating portion on the bottom of the cooking chamber below a metallic partition plate so that steam can rise up the plate for

direct steam heating the food while preventing the microwave from going into the water heating components, in view of the teaching of Kawada.

6. Claims 5, 10 and 16-18 are rejected under 35 U.S.C. 103(a) as being obvious over Hayakawa (WO 03/077604), in view of Yoneno et al (US 5,525,782), as applied to claims 1, 8, 9, 12-15, 20 and 21 above, and further in view of Kurita (US 6,232,587) (previously cited).

Hayakawa combined with Yoneno shows every feature as claimed except for the use of a high frequency material for forming the partition plate. Kurita shows a microwave oven with steam generating portion and also partition plates 28a and 28b of a microwave absorbing material for generating heat in response to the microwave generation in the heating chamber to act as a preheating means to increase the temperature in the heating chamber (see Figures 3 and 7 and col. 5, lines 41-59 and col. 7, lines 34-58). To form the food supporting partition plate with the same material would have been obvious to an ordinary skill artisan as this would heat the food more efficiently because of direct food contact. It would have been obvious to an ordinary skill in the art at the time of invention to modify Hayakawa combined with Yoneno to use a microwave absorbing material to form the partition plate as the regenerating plates for preheating the oven for more efficient heating result, in view of the teaching of Kurita. In regard to claims 16-18, the exact heating steps would have been a matter of engineering expediencies depending on the material of food and type of cooking desired once it is taught to use a preheating step by Kurita (see Figures 10 and 11 and col. 7, line 32 – col. 9, line 67).

7. Claim 19 is allowed.

8. Applicant's arguments filed 1-23-2006 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (571) 272-4782.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 472-4777. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
3-31-2006